DOCUMENT RESUME

ED 441 774 SP 039 230

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TITLE Achieving Successful School-University Collaboration.
PUB DATE 2000-04-00
NOTE 43p.; Paper presented at the Annual Meeting of the American Educational Research Association (New Orleans, LA, April 24-28, 2000).
PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Administrator Attitudes; *College School Cooperation; Elementary Secondary Education; *Faculty Development; Higher Education; *Partnerships in Education; Preservice Teacher Education; Public Schools; Teacher Attitudes; Teacher Improvement
IDENTIFIERS Chicago Public Schools IL

ABSTRACT

This study investigated participant perceptions of essential elements for establishing and maintaining successful school-university partnerships for school improvement, noting differences in perceptions of participants involved in voluntary partnerships versus those involved in partnerships required by the school district (schools placed on probation in the district's reform efforts). All partnerships involved one university and part of the Chicago Public Schools. Researchers developed a structured Q Sample of 54 items based on a grounded theory of educational partnerships. The 34 participants were principals, assistant principals, teachers, and university partnership coordinators from 10 school-university partnerships. Data analysis identified four elements, with a fifth deserving attention: (1) being goal-oriented, with short-term focus; (2) having persistence/existence (survival of the partnership); (3) being dynamic and adaptable; (4) stressing important interactions (communication, hard work, and attention to group dynamics); and (5) using action planning to develop operational strategies and steps for solving problems and understanding each partner's corporate/institutional structure. Partners involved in schools on probation tended to cluster together with a goal-oriented, short-term focus. Two appendixes present the Q Stimulus Items and a PQMethod printout of factor characteristics, standard errors, and distinguishing statements for each factor and consensus statements. (Contains 29 references.) (SM)

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Achieving Successful School-University Collaboration

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Paper presented at the Annual Meeting of the
American Educational Research Association
New Orleans
April, 2000

SP039230

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Acknowledgements

The authors wish to thank Dr. Robert Mrtek, The University of Illinois at Chicago, and Dr. Steven Brown, Kent State University, for their kind assistance with Q Methodology. Any errors in the application of this methodology, however, should be attributed to the authors.

Introduction

Colleges of Education continue to be involved in a variety of school-university partnerships. Such partnerships may be developed to take advantage of grant funding or may be part of the movement to create Professional Development Schools as initiated by the Holmes Group (Fullan, Galluzzo, Morris, and Watson, 1998). External partners may also be called upon to provide technical assistance to comprehensive school reform programs (Education Commission of the States, 1998).

Many Chicagoland universities maintain school-university partnerships with schools that are part of the Chicago Public Schools. The purpose of this research study was to investigate participant perceptions of essential elements required to establish and maintain successful school-university partnerships for school improvement. All of the partnerships involved a single Chicagoland university and schools that were part of the Chicago Public Schools. Further, the study sought to uncover differences in perceptions of participants involved in voluntary partnerships vs. those involved in partnerships required by the school district. The latter involved schools placed on probation by the district in its effort to effect school reform. Each school on probation was required to implement a School Improvement Plan that included an external partner.

Theoretical Framework

The theoretical framework for the study is based on both organization and interorganization theory. Viewing an educational partnership as an organization suggests examination of such elements as members, structure, goals, resources, and output, as well as its operation within an environment. Partnerships may be established in response to environmental turbulence or uncertainty of member organizations (Daft, 1989). Partnerships link two or more organizations in collective, goal-directed behavior. Study of interagency relationships includes analysis of process dimensions (e.g., flow of information and resources) and perceived effectiveness (Van de Ven, 1976). Gray (1989) suggested that partners negotiate and renegotiate their relationship as they work together to solve a problem of common interest. The dynamic nature of partnerships as relationships may reveal stages or levels of interdependence including cooperation, coordination, and collaboration (Cook and Cookingham, 1980; Intrilligator, 1992).

There is a growing body of literature on educational partnerships. Tushnet (1993b) concluded that because of the complex nature of partnership process, partnerships may not be the best approach to achieving educational reform. Further, Tushnet found that while parity among the partners may be expected (1993a, 1993c), achieving successful outcomes may not be related to the specific structure of partnerships (1993b). Communication may be more difficult because of cultural differences between schools and universities (Teitel, 1998). Achieving parity in educational partnerships may be difficult "especially when teachers are in equal relationships with those whom they formerly viewed as authorities" (Teitel, 1996, p. 2). Investigating members' reasons for staying involved in a partnership project, Borthwick found that "member participation was sustained primarily due to project focus, including worthwhile goals, broader visions for school reform, and project outcomes" (1994, p. 239). Exchanges for mutual benefit was the second reason given for continued participation. Teitel's (1998) analysis of the relationships between 20 partnerships in a network developed by a state department of education uses the metaphors of separation, divorce, and open marriage to describe the outcomes of dysfunctional partnerships and encourages honest discussion of process issues.

Methodology

Q Sample. Methodology for the study involved the development and use of a structured Q Sample of 54 items. (See Appendix A for a list of the Q Stimulus items.) The Q Sample was systematically developed based on a grounded theory of educational partnerships (Borthwick, 1994, 1995) and contained four stimulus items (statements) for each of the 13 categories listed in the taxonomy below. Two items related to politics in partnerships were based on Waltman (1996). The Q Sample can be described as a deductive sample based on theoretical considerations; however, the grounded theory upon which the sample was based was developed inductively using constant comparative analysis (Glaser and Strauss, 1967) of interviews, transcripts of meetings, project director's log, and documents from a specific school-university-community partnership (Borthwick, 1994, 1995). "The goal is to produce a set of 40 to 50 statements that is as comprehensive as possible so as to mirror the range of commentary being voiced in the public at large" (Brown, 1980, p. 260). The Q Sample was pilot tested with two individuals with experience in educational partnerships; the wording of a few items was revised based upon their input as well as the work of the authors in partnerships within the Chicago Public Schools.

	Domain	Category	Q Stimulus Items
Partnership Process	Focus	Goals	5, 6, 7, 8, 53
		Context	1, 2, 3, 4
		Outcomes	9, 10, 11, 12
	Members	General Characteristics	13, 14, 15, 16
		Commitment	17, 18, 19, 20
		Roles and Responsibilities	21, 22, 23, 24
	Needs and Resources	Funding and Other Material Resources	25, 26, 27, 28
		Connections, Sharing, Exchanges	29, 30, 31, 32
	Interactions	Communications	33, 34, 35, 36
		Decision-Making/Action Planning	37, 38, 39, 40
		Group Dynamics	41, 42, 43, 44, 54
		Inquiry Into Partnership Process	45, 46, 47, 48
	Stages	(Stages)	49, 50, 51, 52

Subjects. Subjects in the study were participants from ten school-university partnerships (N=34). While all partnerships were between Chicago Public Schools and the selected Chicagoland university, five of the partnerships had been established because the schools had been placed on probation and were required to have an external partner. These schools included three high schools (grades 9-12) and two elementary schools (grades PK-8 and K-8). The majority of the students (between 77-96%) in these schools were from low-income families. (See Table 1.) The other five schools were involved in voluntary, grant-related partnership activities funded through the Chicago Annenberg Project. These schools included one high school (grades 9-12), one middle school (grades 6-8) and three elementary schools (grades PK-6, PK-8, and PK-9). The majority of the students (between 86-98%) in these schools were from low-income families.

Selection of a representative set of persons is important to the use of Q methodology. "What is of interest ultimately are the factors with at least four or five persons defining each" (Brown, 1980, p. 260). Subjects included 10 principals, one assistant principal, 10 teachers, and 10 University partnership coordinators. Additional subjects included two directors from the University's center for collaborative activities; these individuals provided oversight to all of the center's activities. Two project directors provided direct oversight only to the partnerships

involving schools on probation, one of these individuals had served as both coordinator and assistant project director and moved into the role of a project director over the course of the study.

Locations	Roles	Number	Pseudonyms
Required Partnerships in Schools on Probation	Principals and Assistant Principal	6	Apover, Brown, Carver, Clark, Martin, Paver
	Teachers	5	Booker, Lewis, Jackson, Tawny, Wilkins
	Partnership Coordinators Employed by the University	4*	Du Bois, Luther, Meriwether, Washington
Voluntary Partnerships	Principals	5	Palomino, Pastime, Patton, Pewter, West
	Teachers	5	Talisman, Tassle, Tatler, Rio, Tavernica
	Partnership Coordinators Employed by the University	4	California, Cascade, Cutter, Cowell Pecos
University's Center for School-University Partnerships	Directors and Project Directors	4*	Addams, Caveretta, Douglas, Sinclair
	TOTAL	34	

*Note. One Project Director also served as a coordinator during the course of this study. This person is listed as a Project Director.

Subjects reported that they had been employed at their school or university sites anywhere from one to 35 years. The average number of years these individuals had been involved in any educational partnership was nine years for staff and coordinators in probationary schools and 13 years for staff and coordinators in voluntary partnerships. Principals had the highest number of years of employment and experience in educational partnerships. The directors at the University's center for partnerships had been employed between 4 and 20 years with experience in educational partnerships ranging from 8 to 28 years. (See Table 2.)

Procedures. To build rapport, researchers recorded (by hand) information documenting the subject's participation in and description of current partnership activity. The 54 Q Stimulus items were printed on small cards, and the stack of cards was shuffled prior to giving it to the subjects. Participants sorted the Q stimulus items along a continuum of *Most Necessary* to *Most Unnecessary* to establishing and maintaining a successful school-university partnership. Subjects were asked to place a specific number of items in nine locations (+4 to -4) along the continuum, using a quasi-normal distribution. The "quasi-normal distribution is merely a device for encouraging subjects to consider items more systematically than they otherwise might" (McKeown and Thomas, 1988, p. 34). However, as explained by Brown (1993), "both the range and the distribution shape are arbitrary and have no effect on the subsequent statistical analysis." Finally, subjects completed a brief interview discussing items placed in the categories of *Most Necessary* and *Most Unnecessary* during the Q-Sort activity and to discuss the advantages and disadvantages of having a partnership at their school site.

Data Analysis and Results

Focus of Partnership Activities

Partners in probationary schools described the focus of their partnership activity as being improved student achievement, especially in the areas of reading and mathematics. This goal was supported through staff development and curriculum development. Other areas mentioned (by one to two schools) included: discipline, motivation, assessment, engaged learning and other instructional strategies, family and parental involvement, and grant writing. Only one partner mentioned whole school reform as a focus.

While members of voluntary partnerships also focused on professional development and reading skills, they mentioned a much wider variety of additional emphases including: advisory, science and technology, scheduling and restructuring teacher time, fine arts, team building, Saturday classes, early high school credit, communication with feeder schools, middle school network, improvement of school image, as well as extended day and summer school programs. As with probationary school partnerships, members also mentioned curriculum development, assessment, engaged learning and other instructional strategies, math skills, family and parental involvement, and student achievement. Once again, only one member mentioned general school improvement as a focus.

Perceptions of Development and Success of Their Partnerships

Each participant was also asked to share his/her perception of the current stage of the school-university partnership on a scale of 0-4 (*Just Beginning to Institutionalized*) as well as the current degree of success (*Unsuccessful to Very Successful*). (See Tables 3 and 4.) Most participants in partnerships in schools on probation saw their partnerships as developing (2) or stable (3), while members of voluntary partnerships reported that their school-university connections were developing (2). As far as degree of success, there seemed to be little difference between members of voluntary and required partnerships. Approximately two-thirds of the respondents indicated their partnerships were somewhat successful and one-third rated them as very successful.

Statistical Analysis of Q Sorts

Responses to the Q Sort were analyzed using PQMethod version 2.06 software (freeware) to establish the correlation between subjects' responses and complete a factor analysis (searching for clusters of responses). Interviews were transcribed, sorted according to Q Stimulus item or other identified themes, and analyzed using constant comparative analysis (Glaser & Strauss, 1967) to provide explanation and extension of the Q-Sort statistical results. The Ethnograph software program was used to assist in sorting data.

Q methodology is described as "a sophisticated way of rank-ordering objects" (Kerlinger, 1986, p. 507). Developed by William Stephenson in the 1930's, this analysis focuses on the relationships among people completing the activity as opposed to the relationships among variables. As Brown (1980) explains, "In Q methodology, the meaning and significance of items is determined by the subject, so that the observer acquires knowledge of their meaning a posteriori, i.e., after the subject has sorted them" (p. 191). Data from the 34 Q sorts were submitted to correlation and factor analysis; this was completed using the PQMethod software's procedures of QCENT (centroid factor analysis) and QVARIMAX (varimax rotation of factors). Table 5 denotes individuals loading on five factors which explain 46% of the variance. Table 6 identifies distinguishing statements (Q Stimulus items) for Factors 1-5 as well as the domains/categories of the statements. (Table 6 is discussed below and Appendix B contains

selected printouts from the PQMethod program, providing a Correlation Matrix Between Sorts, Factor Characteristics, Standard Errors, Distinguishing Statements for Each Factor, and Consensus Statements.)

Of the 34 study participants, 23 clustered into one of five factors. The largest group (Factor 1) consisted of seven persons, all working at probationary schools. Factors 2 and 3 included five and four persons, respectively, who were either external partner program directors or working at schools with voluntary partnerships. Factor 4, which included three persons, was a mixed group, and Factor 5 consisted of four persons working at voluntary schools.

Factor 1. The participants comprising Factor 1 were two principals (Paver and Brown), one assistant principal (Apover), three teachers (Jackson, Lewis, and Wilkins), and one coordinator (DuBois) at four different probation schools. This group felt the most necessary elements in a successful partnership were that: *(5) partners share common goals and can articulate them; (37) partners discuss and agree on their process for shared decision-making; (39) partners use action planning to develop operational strategies and steps for solving problems that can be expected to arise during the normal course of business; and (52) as the partnership progresses, the role and responsibilities of the school should increase as those of the external partner decrease*. One teacher explained that all his/her choices "[had] to do with...sharing common goals, and articulating them...because each group needs to know what they're doing and why. And they need to be able to get the other partner to understand what...their goal is" (Lewis). Another teacher emphasized the need for common goals so that goals could be achieved: "The first step in any change process is to determine what the goals are, and...for all partners to be able to explain what they are" (Jackson). An assistant principal, who repeatedly talked about the need for teacher input in any change process, stressed: "It's important that [shared decision-making] is established up front" (Apover). Least necessary to a successful partnership, according to these probation school workers, were that *(30) exchanges between partners are mutually beneficial; (25) the partnership is adequately funded with prospects for continued funding; (29) opportunities for networking link partner members to other individuals, groups, and organizations for mutual, project, and community benefit; and (2) the school infrastructure is up to date*.

Thus, this group, predominately made up of probation school teachers and administrators, wants to clearly understand everyone's goals, to have some structure and predictability in the change process, and to ensure that their school has an equal voice in partnership. Eventually, this group wants the external partner to fade away, allowing them to solve their own problems. Three of this group's four beliefs about what is least necessary to a successful partnership reflect a lack of interest in how the university partner will benefit from the association or even if the association will be able to continue. One principal stated, "We're not in this for research...Research plays a part in what's brought into the school as to what has been working and what hasn't been working" (Paver), perhaps again asserting the importance of the school's needs in the face of what s/he perceives to be the University self-interested motivation for coming into a school.

Factor 2. The remaining four factors were composed almost exclusively of persons working at schools with voluntary partnerships and of the University directors. Factor 2 included two external partner project directors (Douglas and Cavaretta), two principals (Pewter and Pastime), and one teacher (Tassle). This group viewed the external partner as a positive force for effecting school change in general as well as in individual schools and wanted to ensure the continuation of partnerships. Factor 2 participants took a broader perspective, expressing the need to consider larger contexts for successful partnerships. For example, a teacher says: "The board and region's policies must be known or the partnership won't last" (Tassle). According to this group, the most necessary elements in a successful partnership were that: *(4) partners are aware of and sensitive to the setting or context of the local school, including board and region policies,*

support services, potential roadblocks, and politics; (23) participant roles and responsibilities, including those of the project director or coordinator, are clearly defined; (25) the partnership is adequately funded with prospects for continued funding; (39) partners use action planning to develop operational strategies and steps for solving problems that can be expected to arise during the normal course of business, and (36) partners disseminate information about project efforts and outcomes at the school, region, district, and national levels. In explaining the importance of disseminating information, one project director said: "Clearly, if we're going to be a...learning community, we need to share this information...That information needs to be disseminated, if we're really going to change schools" (Douglas). Least necessary elements were that: *(5) partners share common goals and can articulate them; (6) the goals of the partnership are worthy; (16) participants include energetic members with time to be actively involved; (11) the goals of the project are successfully met; and (1) the school is stable.*

Factor 3. Factor 3, consisting of two University Center directors (Sinclair and Addams), one coordinator (Cowell), and one principal (West), values process, adaptability, and energetic personalities that are able to thrive in an ever-changing environment. This group felt that the elements most necessary to a successful partnership were *(8) partners re-examine and change goals over time; (16) participants include energetic members with time to be actively involved; (37) partners discuss and agree on their process for shared decision-making; (43) multiple partners operate as peers, and although partners may carry unequal loads, no partner dominates over the others; and (49) even if it becomes institutionalized, the partnership is dynamic and continues to adapt to changing conditions.* The least necessary elements were that *(3) the community is stable; (23) participant roles and responsibilities, including those of the project director or coordinator, are clearly defined; (35) partners communicate through persistent attempts at personal contact, small group meetings, and systematic written information; and (54) lobbying by special interest groups influences decisions in the collaborative.* Thus, this group emphasizes flexibility and fluidity over structure and definition. One director, in explaining why s/he felt that role definition was least necessary to a successful partnership, said: "[roles and responsibilities] change so regularly, that clearly defining [them] and putting them on paper and handing them out to everybody means then they want to hold you to something that, six months from now, doesn't even...pertain to the project anymore. I think that happens fairly regularly" (Addams). This group is also notable for its composition: all are in top leadership positions. The principal in the group, who values high-energy people, identifies herself/himself as "high energy": "It's especially important that you get people that are energetic. I'm high energy, so I look for project directors, partners that are high energy...that will maintain that level of energy right through the entire project...I like to start something off with a bang and end it with a bang" (West). The values and beliefs of this group may be at odds with the needs of those working at probation schools, who want to make sure their voice is heard and respected, whether or not they are "high-energy" people, and who emphasize the importance of clarity, structure, and predictability.

Factor 4. Factor 4 is a mixed group, composed of two coordinators (California and Cutter) at two voluntary schools and a teacher (Tavernica) at a probation school. These persons stressed the importance of regular communication, hard work, an awareness of group dynamics, and the eventual phasing out of the external partner. To this group, the most necessary elements were that *(35) partners communicate through persistent attempts at personal contact, small group meetings, and systematic written information; (42) partners couple hard work with attention to group dynamics including political considerations; and (52) as the partnership progresses, the role and responsibilities of the school should increase as those of the external partner decrease.* A stable community (3) was considered the least necessary, according to this group.

Factor 5. Factor 5 included two principals (Patton and Palomino), one teacher (Tatler), and one coordinator (Cascade), all at schools with voluntary partnerships, who were significantly comparable only in two items chosen as least necessary: *(39) that partners use action planning to develop operational strategies and steps for solving problems that can be expected to arise during the normal course of business, and (46) that participants understand each partner's corporate institutional structure and how to negotiate that system*.

Stability. An important commonality among all Factors was that items about stability--*(1) the school is stable, (2) the school infrastructure is up to date, and (3) the community is stable*--were named as least necessary to a successful partnership. One project director (Cavaretta), in Factor 2, explained that school stability is "not a prerequisite," because the external partner's work has been "significant" in many schools that lack stability. Similarly, a principal in Factor 1 (West) said, "Most of our Chicago schools have somewhat unstable communities. We have...a lot of children that transfer in and out. I don't think that that is a priority, when you're developing a relationship with schools." An up-to-date infrastructure was also generally considered unnecessary, but possibly because it is perceived as adequate: "Infrastructure is not that important. At any rate, it's fine here. I have new computers. We have new windows. Each year we can buy what we want" (Tavernica, Factor 4).

Consensus Items. Table 7 lists Q Sort values (ranks) for statements sorted by consensus vs. disagreement. Items at the top of the table are those with the most agreement by the 34 participants in the study. Items at the bottom of the table are those with the most disagreement by the 34 participants in the study. Items 10, 31, and 45, listed in Table 6, appear at the top of the list in Table 7. Item 13, *Participants possess varied and complementary skills, knowledge, and expertise*, also appears at the top of the list in Table 7; however, it was not found to be statistically significant at either $p<.05$ or $p<.01$ levels in the factor analysis.

Discussion

The section on results limited comments to the individuals who loaded on specific factors. The section below will include supporting comments from other interviews to aid in the discussion of the results. For the purposes of this paper, the discussion will relate results to Borthwick's grounded theory (1994, 1995) on which the Q stimulus items were based. In a sense, this study tests that theory.

> One can rarely generalize to populations from Q persons samples. Indeed, one usually does not wish to do so. Rather, one tests theories on small sets of individuals carefully chosen for their "known" or presumed possession of some significant characteristic or characteristics. One explores unknowns and unfamiliar areas and variables for their identity, their interrelations, and their functioning. (Kerlinger, 1986, p. 521)

It is also important to note that the grounded theory was tied to a comprehensive review of the literature on educational partners. (For reviews of the literature see Borthwick, 1994; Su, 1990; and Clark, 1988.)

Factor 1: Goal-Oriented, Short-Term Focus

Individuals who loaded on Factor 1 were all involved in schools on probation. Their goal orientation is not surprising. They are anxious to see their students achieve higher scores on standardized reading and mathematics tests. Teachers and principals are anxious to remove the stigma of being "on probation" to enhance the school's reputation and for personal reasons. As explained by a principal,

> Getting the trust of the faculty .... [is] especially difficult in a school setting where the teachers are on the defensive because they've been dealt this probation blow. Because, uh,

> when people are in a situation like that, they fear. And, uh, they fear a number of things, but the big thing they fear is their further jobs, let's face it....And they get this terrible threat that maybe all this will end because the test scores are too low....You need to be really good to get people like, to turn those folks from their fears into...a cohesive group that will work together for improvement. (Clark)

Likewise, coordinators in schools on probation were anxious to help the school raise student achievement levels. Helping to remove a school from probation enhanced the university status as well.

Factor 1 individuals focused on the short term. They were less interested in exchanges for mutual benefit, networking, and continued funding of the partnership. As initial funding for external partners for schools on probation came through the Board of Education, a lack of interest in funding seems natural. The lack of interest in benefiting the university which was being paid to serve as an external partner is again natural, as six of the seven individuals on this factor were school rather than University employees. However, Borthwick (1994, 1995) found that member participation in an educational partnership was sustained by project focus and outcomes as well as exchanges for mutual benefit. The Factor 1 lack of interest in networking and continued funding suggests a short-term orientation to the partnership, working to achieve the goal and then actually being glad to see the partner go. As one coordinator concluded:

> I think that this principal sees, um, this situation as, um, the probation monster, and that that only exists because their test scores are down, and we're only in the school because they need to get their test scores up. And ... as soon as that happens then they'll be rid of us. (Washington)

Factor 2: Persistence/Existence

Individuals who loaded on Factor 2 seemed more interested in the survival of their partnership than achieving specific goals. Their orientation is quite the opposite of individuals loading on Factor 1. Their priorities appear to be well balanced moving across four of the five domains of the Q Sort, including attention to context, members (roles and responsibilities), needs and resources (funding), and interactions (communication and action planning). However, their lesser concern with goals and outcomes may turn out to be problematic. Borthwick (1994) found that "member participation was sustained primarily due to project focus and exchanges for mutual benefit. Within project focus, both goals and outcomes were emphasized" (p. 231). While Douglas states that "in order for schools to continue to make the changes at the rate they need, that there will always be a need for partnerships with schools," individuals on Factor 2 seem less concerned with agreement on and achievement of specific goals. As expressed below, Cavaretta's approach to goals seems more akin to Factor 3 than Factor 1:

> I do agree with the idea of continually reflecting and changing, refining goals, using your work as formative, that this is a process, that there is no partnership that is successful that is static. This is one of the problems with the design that starts out with very specific parameters and you must meet these sets of activities. You're talking about two organisms that come together. Both change in the course of the relationship. That's why I put 'clearly articulates shared goals' a little lower than I might have. It is important that you both agree in what your goals are about. But, your goals will alter as you move though the process. (Cavaretta)

Factor 3: Dynamic and Adaptable

Individuals loading on Factor 3 emphasize school-university partnerships as a dynamic process that includes reexamining and changing goals and adapting to changing conditions even if institutionalized. Interestingly, in drawing a model of an educational partnership, Borthwick (1994, 1995) chose an irregular (amoeba-like) shape to represent its dynamic nature. Lack of interest in clearly-defined roles for partners also reinforces a dynamic, adaptable concept of partnerships. The need for high-energy members in the partnership may be related to the dynamic nature of an interorganizational partnership. High-energy participants can be expected to deal more successfully with the complexities of an evolving partnership. Further, a director of the University's center for educational partnerships reflected on the importance of enthusiastic participants, particularly in schools on probation: "[T]he probation process has involved us with some schools where the principal and ... teachers aren't all that enthusiastic about doing this...." (Sinclair). A coordinator also pointed out that at his/her school, the principal was working with five external partners at the same time, requiring the principal to have "organization skills and management ability" (Cascade).

Factor 4: Important Interactions

Important items for this group fell in the domain labeled Interactions. Focusing on communication, hard work, and attention to group dynamics suggests that this group expects partnerships to accomplish their work through effective interactions. In evaluating data collected for her study, Borthwick (1994, 1995) noted that Interactions was the domain with the highest number of data segments and Communication was the category most frequently mentioned. Like Factor 1, this group also expected the role of the external partner to decrease over time.

Factor 5

Perhaps because these participants were from voluntary partnerships, their priorities differed significantly, especially from Factor 1 and Factor 2. While Factor 1 and Factor 2 groups valued action planning, this group did not. In order to interpret this category, the researchers would need to talk further with the participants who loaded on Factor 5.

Perceived Advantages and Disadvantages of These School-University Partnerships

During each of the thirty-four interviews conducted for this study, participants were asked to identify both advantages and disadvantages of their school-university partnerships. (See Tables 8 and 9.) This question was asked apart from the Q-sort activity. Although most of the responses gathered tend to reflect items within the Q-sort, they also serve to elaborate on the central research question—what are the essential elements of a successful school-university partnership. Furthermore, they highlight the significance of particular items in the Q sort. Both the advantages and disadvantages cited focused heavily on the model of the partnership as a model of professional development.

Advantages. Professional development based on the research-based expertise of the external partner emerged as the most salient advantage. This was mentioned by at least twenty-one participants directly and implied in other comments as well. The focus of professional development was mainly for teachers who were assisted by the external partner in various areas: teaching strategies, curriculum, assessment, arts, reading, math, science, conflict resolution, advisories, parent involvement, dealing with ethnic groups, bridging middle school and high school, middle school philosophy and others. External partners may also enable teachers in the partnership to share their strengths during workshops, for example. The Q-sort items most closely related to this advantage include (*13) Participants possess varied and complementary skills,*

knowledge, and expertise, and *(31) The partnership encourages members to share information and expertise*, although the element of reciprocity is more evident in the sort items than in the open-ended responses. *(28) Resources extend beyond funding to include other material assets and or the sharing of information and technical expertise* also relates to this finding. The areas mentioned above often refer to the focus and goals of the partnership. This is addressed by card *(5) Partners share common goals and can articulate them*, although, again, the sort prompt implies a greater common reciprocity absent from the direct responses.

The advantages of a having the University per se for a partner were mentioned by eight people. Student observers, student teachers, university courses and programs, the opportunity to present at conferences, and university faculty expertise all can contribute to the vitality of a school.

> We work with [the University]... that really helps with our partnership...quite a few of the teachers go there for Master's, or they went there for their undergrad. And that also makes it an effective partnership, because they know who the professors are, and they can give us input... we feel comfortable having them come to our school, because we know the quality of their instruction or...the quality of their help...and what we can get from them. (Rio)

The second most salient advantage, mentioned directly by at least twelve respondents, was the additional resources, including grant funds, available to the schools. Schools appreciate discretionary funds beyond the standard school budget.

A third advantage, cited by at least nine of the respondents, was the opportunity for collaboration and networking provided by partnerships. Partnerships involve meetings within schools among teachers and staff, and among various schools, especially when partnerships are part of networks. The traditional model of school life does not lend itself to collaboration, and the partnership intervenes to force personal contact. The cards *(29) Opportunities for networking link partner members to other individuals, groups, and organizations for mutual, project, and community benefit*, and *(17) Individuals exhibit personal commitment through attendance at meetings, sustained involvement, taking responsibility, and effort*, reflect the strength of partnerships in reducing isolation in education.

Five interviewees cited feelings of being supported in their efforts. A partnership can contribute a feeling within school faculty and staff that others care about education and about their work. The phenomenon of isolation is also reflected in the responses that extol the value of outside influence for producing change within the generally closed school system. At least five respondents mentioned outside forces and another five implicitly did while citing change as an advantage of partnerships. "[S]ometimes, for me, it's just having someone outside ...of CPS that I can bounce ideas off of, someone outside of the circle of CPS, that can bring in additional resources that aren't already tied into the larger...CPS network of people...fresh ideas" (West). Change may be caused by the pressure of an outside influence. "[I]n order for schools to continue to make the changes at the rate they need, ...there will always be a need for partnerships with schools ...schools are cultures that are trying to keep up with the rate of change..." (Douglas). Some of the resistance found in schools is revealed in the section on the perceived disadvantages of partnerships.

Five participants mentioned that students benefited from the partnership. "There are numerous advantages. First, to have resources to support you that are on the cutting edge of learning. Secondly, there are your colleagues to help you focus on common goals. Finally, learning becomes meaningful to you and your students which is the greatest advantage" (Talisman). There is only one card in the sort that refers specifically to students: *(21) Students are involved in meetings and participate in decisions*. Although this card was included in the sort

based on the work of the University in schools on probation, (see Borthwick et al., 1999), it was not much affirmed by those who completed the sort. Is it so obvious that the purpose of school-university partnerships is to benefit students that, again, the benefit to students cannot be an element of a successful partnership?

Five participants reacted favorably to the bonds between schools and their communities and parents that partnerships have fostered. One card describes this: *(32) The partnership has an effect beyond the partners that may include the local or wider global community*. Three people felt that strong leadership was an advantage, in part because the leader can force patterns that aren't part of the traditional school days such as attendance at special meetings and encouragement to try new ideas. One card states this idea: *(15) Participants include strong leaders*.

Disadvantages. Teacher resistance was the greatest disadvantage of school-university partnerships identified by the participants. Teacher resistance to the goals of the projects was mentioned twelve times. This resistance was intensified in the schools on probation because of fear and pride. Teachers were afraid that they might be moved around the system or identified as less than competent because of their students' test scores or because the external partner was scrutinizing their teaching methods. As one teacher stated,

> Reading... and math...formerly had been ...not even really an issue for secondary teachers. They were, students came in, they were expected to be able to read on the high school level, and they were prepared, at that point, to go on to high school. Whereas now, students come in with elementary reading scores, and teachers are...in a difficult position because they do not want to acknowledge that they are not prepared to address the needs of the students. (Jackson)

Numerous responses from schools on probationary status exhibited a resentment of the outside partner as one who was coming in to address the inadequacies of the teachers. Teachers felt that they had little voice in the goals of the project. As one teacher stated, " Probably the biggest disadvantage has been that the staff did not have a say in who was going to be the external partner...the staff...probably resented the fact that...someone had to be here, anyone. It was just the idea that...someone else made the decision for someone to come in and the staff did not" (Lewis). Seven respondents indicated that goals of the partnership were not shared. School personnel felt that the external partner did not always understand the social ills that influence student achievement, that money could be spent in better ways than on the goals of the partnership, and that University personnel did not reflect the racial characteristics of the students. Clearly, the sort item *(5) Partners share common goals and can articulate them*, is of paramount importance, particularly in schools where a partnership is mandated.

There was some disappointment in the external partners. Three respondents, including teachers and a coordinator, suggested that the external partner did not have adequate staffing for the project goals. The coordinator referred to promises that were not delivered. One teacher noticed the transient nature of some partners. "...I think there is a perception of external partners as being...another thing, another ship that will pass in the night...The trust building needs to continue." (Jackson)

Another major disadvantage cited by eight respondents was lack of time to do the business of the partnership. The structure of schools does not accommodate outside influences. Teachers are busy and often feel they have no extra time to devote to meeting, collaborating, and traveling to sites outside of school.

Four external partners cited leadership as a disadvantage. Without the help of the school leadership, the external partner is left with the responsibility for creating change but without the authority to conduct activities towards that end. Again, *(15) Participants include strong leaders* emerges as a central item. External partners cited low teacher attendance at meetings and

workshops, teachers who were absent when consultants were scheduled to work with them in their classrooms, and teachers who found excuses not to confer with them during their planning periods. Principals might also sabotage the work of the partnership by scheduling conflicting meetings or not publicizing partnership events. Two external partners complained that principals would assign them to low-performing teachers, losing sight of the focus on whole-school change. One other external partner did not have hope that the science teachers in the school could ever become effective. One coordinator complained that the resources of the University were underutilized because of indifference within the College of Education.

Finally, five respondents saw no disadvantages to school-university partnerships.

Participant Perceptions of Politics in School-University Partnerships

Stimulus items 42, 44, and 45 addressed various aspects of the role of politics in school-university partnerships. Participant comments on these items during follow-up interviews evidenced an overwhelmingly low regard for the importance of politics in such collaborations.

Summary of *(42) Partners couple hard work with attention to group dynamics including political considerations*. Four people commented on this item. All four represented probation schools. (Two loaded on Factor 2, and two loaded on no factor.) Two teachers responded. One felt that political activities were not relevant to the task at hand which was elevating math and reading scores, and the other felt that political activity had no place in a school. One coordinator felt that political activities could pose a barrier to partnership activities, albeit a preventable barrier, but that, in any case, political activities are one of the least important elements in a successful partnership. One administrator felt that political activities should be minimized. None of the four respondents commented on the "hard work" mentioned in this item.

Summary of *(44) The coordinator engages in non-partisan political activity*. Of the thirteen people who commented on this item, six were project coordinators, four from voluntary schools and two from probationary schools. (Two loaded on no factor, while the other four loaded one each on Factors 1, 3, 4, and 5.) Five of the six coordinators recognized the importance and reality of politics in the partnership process, especially in dealing with the Board of Education in Chicago, and they also endorsed partisan politics rather than non-partisan politics. One of these felt that coordinators should serve as informants to upper-level University administrators who would actually conduct the political activity. In a similar vein, another felt that coordinators could help politicians be more responsive to education and educators. Two of these mentioned that although politics was good, it wasn't essential to the here-and-now activities of the partnership. The sixth coordinator was confused about the meaning of the meaning of "non-partisan."

Four administrators responded, three from probationary schools and one from a voluntary school. (Two loaded on Factor 1, one on Factor 2, and one on no factor.) One thought the coordinator should be neutral on political issues, another felt that partisan political activity was not professional, one thought that political activity was insignificant and did not distinguish between partisan and non-partisan politics. The fourth claimed to be unclear about the concept, but thought the coordinator could take care of politics on days he or she was not assigned to the school. "I don't know what they mean by this, but I really don't, I mean, if they're out to save the whales, is that non-partisan political activity? So what? Go ahead and do it....as long as it doesn't take away from the time they put into the project" (Clark).

Three teachers responded, two from probationary schools and one from a voluntary school. (Two of the teachers loaded on no factor and one on Factor 1.) One thought that politics was not important, while another thought politics should be kept out of school. Neither made a distinction between partisan and non-partisan. The third teacher thought that non-partisan politics was better than partisan politics but that all politics were bad.

Summary of *(54) Lobbying by special interest groups influences decisions in the collaborative*. Eighteen people commented and all felt that this item was one of the least important elements of a successful partnership. Of the seven teachers responding, four were from probationary schools and three from voluntary schools. (Three loaded on Factor 1, one on 2, one on 4, and two on no factor.) They all felt that special interest groups should not be allowed to influence the goals of the project. "[T]he partners themselves should be the special interest groups as far as I'm concerned" (Lewis).

Of the six coordinators who responded, three were from probationary schools. (Two loaded on no factor, and one each loaded on Factors 1, 3, 4, and 5.) All felt that special interest groups should not influence the partnership. They mentioned that all voices should be heard, that politics should be irrelevant, that special interest groups could interfere with a good relationship between partners.

Five principals rated this item as unimportant, three from probationary schools and two from voluntary schools. (Two loaded on no factor, and one each loaded on Factors 1, 2, and 5). They felt that lobbying had no place in a partnership, that it wasn't professional or necessary, that it should have no impact or be acknowledged, and that it should not be linked to the partnership.

Discussion. Analysis of the data revealed several factors that may help explain the responses on the politics items. First, most respondents expressed some level of confusion over the meaning of the term politics. Items *(42) Partners couple hard work with attention to group dynamics including political considerations*, and *(54) Lobbying by special interest groups influences decisions in the collaborative* represent two of the three political activity questions that were largely interpreted by the respondents as partisan politics. Item *(44) The director coordinator engages in non-partisan political activity* specifically required a participant response based on politics as non-partisan. While most respondents understood non-partisan as non-party politics and within the context of this study at the micro level, several of the respondents were unclear of the meaning of non-partisan politics. Responses to item 54 also indicated an understanding that "lobbying of special interest groups" was not important because (from their point of view) it would have to take place outside the partnership by people who were not partnership participants.

Teachers and administrators in schools and universities are participants in the political process whenever they attempt to influence the authoritative allocation of resources to support or not support values. Depending in large measure on the motivation of the persons involved in this activity participation can be regarded as positive or negative, ethical or unethical (Iannoconne, 1991; Easton, 1990). Given the frequent attention to negative interpretations of politics, it's not surprising that the response many have to questions about the importance of politics in the success of partnership is negative. Hence, while responses to the political activity items in this study lack support for political activity as an important factor in the success of school-university collaboratives, further analysis of the data suggest inconsistent understanding of the meaning of political activity.

Participant Comments on Use of Q Methodology

During interviews, subjects were asked to comment on the Q Sort activity. Several participants, including a director of the University's center for partnerships, thought that all of the Q stimulus items were important to some extent. "It was hard to classify any of the items as negative," said one principal (Paver). On the other hand, several other subjects agreed with the "*Most Unnecessary*" title for the -4 category: "I don't really think that they're necessary," said another principal (West). In describing the "0" column, a teacher confirmed, "I guess what I put there are things that maybe I don't have a strong opinion about either way. You know,

not 'unnecessary' or 'necessary' spot for it.... But the things in the middle....[t]hey're very interchangeable ... [e]specially in the -1 to +1 area" (Rio).

Several participants commented on the complexity of the process and the number of items to sort. Several principals had underestimated the time needed for the activity, requiring the interviewer to reschedule the appointment. The forced nature of the sorting process caused frustration on the part of several subjects. "It was frustrating to choose only three [items] for the extreme categories" (California). However, a principal pointed out, "when you're ... forced to make the choices, I think values come into it too" (Brown). Four subjects commented on the overlap of selected Q Stimulus items, and one mentioned that they placed the repeated items on the unnecessary side of the continuum. "So, some of them, I put them further down because I already mentioned them further up" (Sinclair). Choosing items to eliminate from the Q Sort could be aided by examining Table 7, Factor Q-Sort Values for Statements Sorted by Consensus vs. Disagreement. Items at the top of the table are those with the most agreement and would probably be the most likely candidates for removal from the sort, at least those hovering near the neutral/mid-point.

While four subjects thought there were too many cards, another participant commented on concepts missing from the sort: momentum or synergy "that's created among a group of partners working together" and the impact of personal relationships within or outside of school (Addams). Addams also felt that the Q Stimulus items focused too narrowly on the school partner, leaving out stability of the university or community agency, for example. A partnership coordinator recommended adding more cards dealing with the "organizational skills and management ability" of the principal in working with external partners and more cards referring to teachers (Cascade). In general, participants found the activity "Quite interesting .... Quite difficult" (Lewis). While one partnership coordinator "saw no personal value" (Meriwether), another said, "It made me think through the elements" (California). One teacher commented that the activity "enabled me to see the interrelationships among the factors involved in a partnership" (Talisman). Likewise, a director of the University's center for partnerships described the Q Stimulus items as "more of a ... web, so that all of these things are, in some ways, interconnected" (Sinclair). However, Sinclair thought the sorting process limited the information obtained from subjects: "I think what you've got is a list of ... maybe priorities ... but you didn't get a picture of my notion of what the process involves, by looking at the interconnections between those that are similar" (Sinclair).

Participant Reflections on Using the Q Sort as a Diagnostic

Participants were asked if they thought the Q Sort activity could be used to help diagnose school-university partnerships by changing the ends of the continuum to "*What's Working*" and "*What's Not Working.*" Most subjects commented favorably. "It might be a good idea," said one coordinator. "So much of what is going on is invisible and this might make it less so. Those who don't say a lot would get their opinions out" (Cowell). One teacher suggested that partners would "be willing to do it because of the way that [the Q Stimulus items] are stated. There was not bias there" (Lewis). A principal commented that it would be "a good evaluation because ... first the person tells you what they think is important, and then they can tell you how much of what they think important is actually happening. I think it would be a good ... assessment technique" (Clark). Another principal suggested that "[i]t helped me to reflect on some of the ... important factors in the relationship.... [I]t helped me to kind of sort through, in my mind, and see some of the steps that ... we need to take to stabilize that relationship with [another university partner] as well (West). Furthermore, a partnership coordinator suggested that it would be "a wonderful discussion to have ... especially from the different perspectives" (DuBois).

Some concerns were expressed with the number of stimulus items included. "[W]hen you have all of these cards, it might get overwhelming, especially to do it in ... with a large group (Rio). A University project director cautioned, "There's a lot of background knowledge that's needed to do this. There's a lot of reading in between the lines, and I think your results would be skewed by the level of understanding of the individuals who did the sort" (Douglas). When asked if it might work with partnership coordinators, Douglas was favorable--"I think we [might] gain a lot of insight ... in the dynamics of even why things aren't working at some schools." As far as personal growth, a partnership coordinator said, "it caused me to think about doing ... some things differently ... next year...., one being to ... really work much harder at ... fostering the communication with the teachers and the principals.... I didn't necessarily do these things ... in as an aggressive way, um, that would match where I put them on the continuum...." (Luther). Another coordinator reflected, ""On another day, I might choose entirely different cards to place in the piles depending on which project I happen to be working on" (Cowell).

Two University employees wondered how the stages of a partnership might affect use of the Q Sort as a diagnostic activity. "All these partnerships are different. They all go through different stages at different times.... I don't know how easy it would be to use it as a diagnostic" (Addams). However, Cavaretta suggested that "[i]t would help diagnose where you are in terms of the stages of building a relationship rather than evaluating the effectiveness of a relationship."

In considering the value of such a diagnostic activity, one principal commented, "The biggest problem I see is that this activity would not tell you what a partnership is accomplishing" (Pewter). However, another principal suggested that "[t]he [partnership] process is as important as the product" (Apover). Finally, a partnership coordinator indicated serious consideration of immediate use: ""We have a meeting coming up next Saturday and I would like to keep this in mind as something to do. I would have fewer cards. It would be valuable to stimulate discussion" (Cutter). As a director of the University center for partnerships concluded, "Maybe talking about some of these things, openly, with people, would help to define and make a partnership clearer....[H]aving a conversation about that--'Are we doing it, or not?' That's ... that's key...." (Addams).

Conclusions and Educational Importance

School-university partnerships are here to stay. With the current emphasis on teacher quality, schools are not only relying on universities for professional development, but schools are becoming more involved in helping universities revamp their teacher education curricula. Shared goals, common planning and peer status have been identified as essential elements of school-university partnerships (Dodge, 1993). Most of the advantages of the partnerships cited were those that benefited the schools. Advantages that benefited the university were largely unreported. While this may be a function of the Q stimulus items and/or probes used during the interviews, it may also be a natural result of the fact that the university is seen as the "expert" from whom the school can benefit. However, it would seem that the external partner could also report many advantages. For example, working in schools may enable the university to learn first hand about the reality of urban schools and urban children. They may also be able to learn many new things from teachers that they could add to their existing repertoire of ideas in order to strengthen their expertise. And, although working conditions for university people are generally less isolated than they are for their school-bound peers, university consultants can also derive pleasure from collaboration and networking in the school context. As pointed out by at least one participant in the study, the Q stimulus items may also need to be revised to enable a more "balanced" response.

The use of Q methodology in this paper identified four factors, with perhaps a fifth deserving additional investigation. The factors suggested that various individuals would operate

differently within the scope of educational partnerships. Some would be (1) goal-oriented with a short-term focus, some would (2) emphasize the persistence/existence of the partnership, some would (3) expect to participate in a dynamic and adaptable interagency collaboration, and others would (4) emphasize interactions involving attention to communications and group dynamics. Highly interesting was that partners involved in schools on probation tended to cluster together with a goal-oriented, short-term focus. Other groups of participants (project directors and directors of the University's center for educational partnerships) clustered on other factors--focusing more on persistence or providing leadership of what was expected to be an ever-changing endeavor. While some partners accepted the reality of politics in interagency projects, the misunderstanding of and/or suppression of the role of politics were also revealed.

While participants in the study reflect but a small group of partnership members across the country, they certainly bring diverse orientations to these interagency organizations. No matter which organization serves as the "external" partner, partnership coordinators/directors and other boundary spanners need methods to engage partners in discussing and reflecting on their partnership processes. Teitel (1996) suggested the use of cases to promote conversation about key issues (e.g., start-up and communications). Professionals might consider the use of Q sort activities and feedback of results as an option in interorganization development. As Gargan and Brown (1993) point out, "Individual Q sorts are instrumental representations of the perspectives of stakeholders and other actors, and the emergent factors are a mathematical summary of the divisions in perspective that are at issue" (p. 356).

After completing the Q sort activity, participants in the CPS-University partnerships were asked about the potential for using the Q sort as a diagnostic instrument through changing the continuum to *What's Working* and *What's Not Working*. Overwhelmingly, participants indicated that this would be practical and that others in their partnership would probably be willing to use the Q sort. Several recommended methods for doing this: (1) simply reducing the number of cards by eliminating redundant or closely-related items, (2) reducing the Q sample to only those items designated as *Most Necessary*, (3) giving only one set of cards to a group, so they would discuss how each item was working and then place the card along the continuum according to the group's view, and (4) giving one or more persons a set of cards to create a web (concept map) of the partnership and then having them explain or describe how their partnership works--giving a "picture" of the partnership. Thus, the Q Sort may enable participants to "consciously and systematically nurtur[e]" (Dodge, 1993, p. 1) their educational partnerships.

Using the Q sort as a tool for organization development holds real promise for "asking people to step back from the day-to-day concerns of the partnership" (Teitel, 1997, p. 15) and enabling members to maintain healthy partnerships. As with other partnership activities, however, finding time for members to participate in improving partnership process may be difficult. The school has traditionally been structured to educate young people but not to educate its own employees. The partnerships discussed in this study were founded on a human resource model that is not accommodated by school structure. For this reason many found it difficult to find time to conduct partnership work, out-of-class and in-class meetings were viewed as intrusive and taxing, and the help of a strong principal to rearrange schedules and encourage compliance was seen as critical.

Finally, school districts and other institutions should give careful consideration to requiring partnerships. According to participants in CPS-University partnerships, such shot-gun weddings (to expand on Teitel's metaphor) give birth in a climate of distrust or even fear, particularly on the part of teachers. However, approximately two-thirds of the participants in CPS-University required partnerships rated their efforts as *Somewhat Successful* (3 points) on a continuum of *Unsuccessful (0)* to *Very Successful (4)*, and one third rated them as *Very Successful*.

References

Borthwick, A.G. (1994). School-university-community collaboration: Establishing and maintaining partnerships for school improvement. Unpublished doctoral dissertation, Kent State University, Kent, OH.

Borthwick, A. G. (1995). Establishing and maintaining partnerships for school improvement. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco. (ERIC Document Reproduction Service No. ED 385 922)

Borthwick, A. , Beverly, S., Jr., Burnett, J., Nauman, A.D., Patay, H.N., Pistorio, C. (1999, April). School-university partnerships and student voice. Paper presented at the Annual Meeting of the American Educational Research Association, Montreal. (ERIC Document Reproduction Service No. ED 430 299)

Brown, S. R. (1980). Political subjectivity: Applications of Q methodology in political science. New Haven, CN: Yale University Press.

Brown, S. R. (1993). A primer on Q methodology. Kent, OH: Author. (Reprinted from Operant Subjectivity, 16 (3/4), 91-138.

Clark, R.W. (1988). School/university relationships: An interpretive review. In K.A. Sirotnik & J. I. Goodlad (Eds.), School university partnerships in action: Concepts, cases, and concerns (pp. 32-65). New York: Teachers College Press.

Cook, D. L., & Cookingham, F. G. (1980). Interagency action: Cooperation, coordination, collaboration. Community Education Journal, 7 (2), 3-4.

Daft, R. L. (1989). Organization theory and design. St. Paul, MN: West.

Dodge, B. J. (1993). School-university partnerships and educational technology (ERIC Digest). (ERIC Document Reproduction Service No. ED 358 849)

Easton, D. (1990). The Analysis of Political Structure. New York: Rutledge.

Education Commission of the States. (1998). Comprehensive school reform: Criteria and questions. Denver, CO: Author.

Fullan, M., Galluzzo, G., Morris, P., & Watson, N. (1998). The rise and stall of teacher education reform. Washington, DC: American Association of Colleges for Teacher Education.

Gargan, J. J., & Brown, S.R. (1993). 'What is to be done?': Anticipating the future and mobilizing prudence. Policy Sciences, 26, 347-359.

Glaser B. G., & Strauss, A. L. (1967). The discovery of grounded theory: Strategies for qualitative research. San Diego: Academic Press.

Gray, B. (1989). Collaborating: Finding common ground for multiparty problems. San Francisco: Jossey Bass.

Iannaccone, L. (1991). Micropolitics of Education. Education and Urban Society, 23, 465-471.

Intrilligator, B. (1992). Establishing interorganizational structures that facilitate successful school partnerships. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.

Kerlinger, F. N. (1986). Foundations of behavioral research (3rd ed.). Fort Worth: Holt, Rinehart & Winston.

McKeown, B., & Thomas, D. (1988). Q methodology. Newbury Park, CA: Sage.

PQMethod 2.06 [Computer software]. Available: http://www.rz.unibw-muenchen.de/~p41bsmk/qmethod/.

Su, Z. (1990). School-university partnerships: Ideas and experiments (1986-1990) (Occasional Paper No. 12). Seattle, WA: University of Washington, Center for Educational Renewal.

Teitel, L. (1996). Getting down to cases. Contemporary Education, 67(4), 200-205. [On-line]. Available: WilsonSelect.

Teitel, L. (1997). Changing teacher education through professional development school partnerships: A five year follow-up study. Teachers College Record, 99(Winter), 311-334. [On-line]. Available: WilsonSelect.

Teitel, L. (1998). Separations, divorces, and open marriages in professional development school partnerships. Journal of Teacher Education, 49(2), 85-96.

Tushnet, N. C. (1993a, April). Educational partnerships as a force for educational change: Findings from a national study. Paper presented at the annual meeting of the American Educational Research Association, Atlanta.

Tushnet, N. C. (1993b). A guide to developing educational partnerships. Washington, DC: Office of Educational research and Improvement. (ERIC Document Reproduction Service No. ED 362 992)

Tushnet, N. C. (1993c). A national perspective on educational partnerships. Paper presented at the annual meeting of the American Educational Research Association, Atlanta.

Van de Ven, A. H. (1976). On the nature, formation, and maintenance of relations among organizations. Academy of Management Review, 1(4), 24-36.

Waltman, R.A. (1995). The Politics of Participation in a School-Community-Business-Collaborative. Unpublished doctoral dissertation, Kent State University, Kent, OH.

Table 1. School Characteristics

School Pseudonym	Building	Size	Low Income**	Demographics	Status of Partnership
Columbia	9-12	1,468 students	77%	54% Hispanic 26% White 18% Black 2%Asian/Pacific Islander	Probation*
Michigan	K-8	753 students	96%	100% Black	Probation
Parks	9-12	673 students	84%	100% Black	Probation
Savant H.S. (Special Education)	N/A	N/A	92%	N/A	Probation
Marshall	PK-8	826 students	92%	100% Black	Probation
Grande	6-8	435 students	86%	69% Hispanic 29% White 2%Asian/Pacific Islander 1% Black	Voluntary
Satin	PK-8	695 students	96%	83% Hispanic 12% White 5% Black	Voluntary
Select	PK-9	621 students	98%	92% Hispanic 5% White 2% Black	Voluntary
Sesame	PK-6	279 students	96%	93% Hispanic 7% Black	Voluntary
Sewell	9-12	1,194 students	95%	81% Hispanic 14% Black 5% White	Voluntary

*Any school which has less than 15% of its students scoring at or above national norms as measured by the Iowa Test of Basic Skills (ITBS) in elementary schools or the Tests of Academic Proficiency (TAP) in the high schools will be placed on probation. In borderline schools other criteria were factored into the decision, including performance on the Illinois Goal Assessment Program (IGAP) tests, attendance rates, and dropout rates.

**"Low-Income" is defined as pupils, aged 3 through 17, from families receiving public aid, living in institutions for neglected or delinquent children, being supported in foster homes with public funds, and/or eligible to receive free or reduced-price lunch.

Table 2 Length of Participant Employment and Experience in Educational Partnerships

Location and Roles

Voluntary Partnerships	Years Employed at this Site							Overall Mean
	Least		Median		Most		Mean	9
Principals	4	6	9	27	28		15	
Teachers	2	2	6	12	15		7	
Partnership Coordinators	3	4	5	6	7.5		5	
	Years of Participation in any Educational Partnership							11
Principals	9	10	15	20	25		16	
Teachers	1	2	3	5	20		6	
Partnership Coordinators	6	6	7	7.5	22		10	

Probationary Partnerships	Years Employed at this Site							Overall Mean
	Least		Median			Most	Mean	14
Principals	0.5	2	12	31.5	35	36	20	
Teachers	3	8	10	27	40		18	
Partnership Coordinators	1	2	2.5	3			2	
	Years of Participation in any Educational Partnership							13
Principals	2	3	20	25	29	35	19	
Teachers	3	4	8	10	20		9	
Partnership Coordinators	2	10	18	11.5			10	

University's Center for School-University Partnerships	Years Employed at this Site					
	Least	Median		Most		Mean
Directors & Project Directors	4	11	12	20		12
	Years of Participation in any Educational Partnership					
Directors & Project Directors	8	17	24	28		19

Table 3. Participant Perceptions of Current Stage of Their School-University Partnership

	Just Beginning	Emerging	Developing	Stable	Institutionalized	No Answer
Voluntary Partnerships	0	1	10	3	1	0
Required Partnerships in Schools on Probation	0	2	6	5	2	1

Table 4. Participant Perceptions of Degree of Success of Their School-University Partnership

	Unsuccessful	Somewhat Unsuccessful	Neutral	Somewhat Successful	Very Successful
Voluntary Partnerships	0	0	1	9	5
Required Partnerships in Schools on Probation	0	0	1	11	4

Table 5 Factor Matrix With an X Indicating a Defining Factor

	Factor Loadings				
Pseudonym	1	2	3	4	5
1 Patton	.3009	.2326	.1098	.2336	.5379X
2 Tassle	.0041	.5574X	0361	-.0169	-.0070
3 Pewter	-.0486	.6022X	.1840	.3065	.1787
4 Pastime	.1991	.5621X	0613	-.1824	.3338
5 Cascade	.1963	.1135	.1555	.4604	.6242X
6 Tatler	.0147	-.0914	0511	.0617	.4065X
7 California	.0748	-.0474	.2731	.4199X	.1653
8 Tavernica	.3078	-.0575	.1235	.5054X	.1863
9 Booker	.5146	-.0234	2953	.1790	.4896
10 Palomino	.1321	.1052	.0765	.2362	.4732X
11 Tawny	.1666	.2349	.4087	.0441	.4535
12 Paver	.5520X	.2212	.1052	.0044	.4549
13 Apover	.4791X	.0291	.1232	-.0265	.1649
14 Carver	.4758	.1744	.2884	.3497	.1459
15 Rio	.4629	.0877	-.0605	.4628	.2772
16 Jackson	.5033X	.0062	.0984	.2192	.0793
17 Martin	.3663	.1522	.3830	.0371	.2646
18 Addams	.0231	-.0115	.5294X	.1587	.3848
19 Washington	.6061	.2179	.4307	.0478	.3862
20 Douglas	3302	.5648X	-.1462	.2924	.0978
21 West	.1964	-.2040	.4896X	.0885	.2005
22 Meriwether	.3220	-.0875	.4853	.2902	.1241
23 Brown	.7387X	.1204	-.0081	.2226	.0745
24 Pecos	.1731	.2655	.4657	.2501	.2741
25 DuBois	.6212X	.1750	.1712	.2539	.0439
26 Wilkins	.5775X	.2055	.1027	.1091	.2901
27 Lewis	.7016X	.0832	.4045	.1271	-.0678
28 Luther	.3536	.2900	.4758	.3045	-.1111
29 Clark	.4050	.0777	.2001	.2465	.2725
30 Sinclair	.3064	.1611	.4970X	.2934	.0538
31 Cowell	.0746	.1459	.6131X	-.0148	.0380
32 Talisman	.0649	-.0838	.1693	.2913	.2138
33 Cutter	.2607	.2001	.1223	.7105X	.1928
34 Cavaretta	.4172	.6788X	.4258	-.0524	-.1665
% expl.Var.	15	7	9	7	8

Table 6 Distinguishing Statements for Factors 1-5

		Factor 1			Factor 2			Factor 3			Factor 4			Factor 5			Consensus Items
Variance Explained		15%			7%			9%			7%			8%			
No. of People Loading on this Factor		7			5			4			3			4			
Group Composition		Schools on Probation			Project Directors & Voluntary			Univ. Directors & Voluntary			Mixed			Voluntary			
Domain	Category	+	0	-	+	0	-	+	0	-	+	0	-	+	0	-	
Focus	Goals	5*					5* 6*	8*									
	Context			2	4*		1			3*			3		2		
	Outcomes						11										10 (0, 1, 1, 2, 1)
Members	General Characteristics						16*	16*	14								
	Commitment																
	Roles & Responsibilities				23*					23*							
Needs & Resources	Funding & Other Material Resources			25*	25												
	Connections, Sharing, Exchanges			30* 29													31 (1, 2, 1, 1, 3)
Interactions	Communications				36*					35	35						
	Decision-Making/Action Planning	37* 39			39			37								39	
	Group Dynamics							43*		54*	42						
	Inquiry Including Inquiry into Partnership Process															46	45 (-1, -2, -1, -2, -2)
Stages	(Stages)	52						49*			52*						

Note Percent Variance is amount of variance explained by the factor.
Q Stimulus items are listed by number (e.g., 39) and are significant at $p < .05$. Asterisk (*) indicates significance a $p < .01$.
Concensus Items do not distinguish between any pair of items. Numbers in parentheses are rankings by each Factor: (Factor 1, Factor 2, ...).

Table 7.

Factor Q-Sort Values for Statements sorted by Consensus vs. Disagreement (Variance across normalized Factor Scores)

			Factor Arrays				
No.	Statement	No.	1	2	3	4	5
13	range of skills	13	0	0	0	0	0
45	research oriented intellectually interesting	45	-1	-2	-1	-2	-2
10	visits and alternative data	10	0	1	1	2	1
31	share information and expertise	31	1	2	1	1	3
32	effects local and global	32	-2	0	-1	-1	-1
44	director political action	44	-4	-4	-3	-3	-4
41	adequate scheduled time	41	3	2	2	1	1
51	institutionalized	51	-1	0	-2	1	0
26	mutual benefit/partners and project	26	0	1	1	-1	2
21	students involved	21	0	-2	0	-3	-1
28	resources extend beyond money	28	0	-2	1	1	1
27	uneven contribution	27	-4	-2	-2	-4	-1
9	tests and assessments	9	0	0	-2	1	-2
17	commitment	17	1	1	2	4	2
33	project director communicates well	33	2	1	0	3	2
19	public recognition	19	-3	-1	-3	-1	-4
49	dynamic even if institutionalized	49	0	1	3	0	1
50	moves through stages	50	0	0	-3	-3	0
14	diversity	14	-2	-3	0	-2	-2
22	teachers target problems	22	4	2	2	4	4
54	lobbying of special interests influential	54	-4	-4	-2	-4	-4
30	mutual benefit/partners	30	-1	2	0	2	2
20	external funding	20	-3	-3	0	-1	-2
46	common understanding of organizations	46	-1	1	-1	0	-3
42	group dynamics and politics considered	42	-3	-1	-2	1	-3
48	reflection for cooperation	48	1	-1	1	-2	-3
8	dynamic goals	8	0	0	3	-1	0
35	communication routinized	35	2	1	-1	3	1
38	consensus	38	1	-3	0	-2	-1
43	no domination	43	-2	-1	2	0	-1
11	goals met	11	1	-1	0	2	2
47	reflection on interaction	47	0	2	1	-1	-2
12	formative evaluation	12	3	0	4	0	2
3	community stable	3	-2	-2	-4	-3	-2
15	strong leaders	15	-1	-1	2	2	2
34	open communication and appreciation	34	3	0	3	0	3
24	steering and oversight	24	-1	0	-4	-2	1
53	focus on change	53	2	2	-2	0	-1
1	school stable	1	-1	-3	-1	2	1
36	information disseminated	36	-1	3	-1	0	0
40	decisions based on communication	40	2	3	3	-1	-1
4	sensitive to context	4	2	4	2	0	0

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Table 7. (Continued)

Factor Q-Sort Values for Statements sorted by Consensus vs. Disagreement (Variance across normalized Factor Scores)

		Factor Arrays				
No.	Statement	No.	1	2	3	4	5
29	networking	29	-2	2	-1	1	3
16	energy and time	16	1	-2	4	2	0
5	common goals	5	4	-1	1	2	1
2	school infrastructure modern	2	-2	-4	-4	-4	0
52	external partner role decreases	52	1	0	-2	4	0
7	interrelated goals	7	2	3	0	-1	4
25	adequate and future funding	25	-3	1	2	3	3
37	shared decision-making	37	4	-1	1	-2	-2
23	roles defined	23	2	4	-3	1	0
6	worthy goals	6	1	-2	0	3	4
18	resources committed	18	-2	3	4	-2	-1
39	action planning	39	3	4	-1	0	-3

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Table 8 Perceived Advantages of School-University Partnerships	No. of Times Cited
Professional development based on current research (Areas of professional development include pedagogy, curriculum, assessment, reading, math, science, arts, leading advisories, conflict resolution, working with parents, working with ethnic groups, articulation between sender schools and high school)	21
Additional resources for schools including grant funds	12
Outside influence causes change in schools	10
Opportunities for collaboration and networking	9
Resources a university can provide	8
External partner staff supports teachers	5
Students benefit	5
Builds ties to community and parents	5
Strong school leadership supports partnership activities	3

Table 9 Perceived Disadvantages of School-University Partnerships	No. of Times Cited
Resistance of teachers/resistance caused by probationary status	12
External partner disappoints school (inadequate staffing, promises not fulfilled, transience, lack of ethnic/racial representation, lack of understanding of social context)	6
Limited time for partnership activities due to structure of school	8
None	5
School leadership fails to support partnership activities	4
Whole-school change not a focus for schools	2
Funding spent on partnership activities could be used for other needed resources such as materials	2

Appendix A. Q Stimulus Items

1. The school is stable.

2. The school infrastructure is up-to-date.

3. The community is stable.

4. Partners are aware of and sensitive to the setting or context of the local school, including board and region policies, support services, potential roadblocks, and politics.

5. Partners share common goals and can articulate them.

6. The goals of the partnership are worthy.

7. Goals are interrelated with teacher, school, regional, district, community, state, and national/international goals.

8. Partners reexamine and change goals over time.

9. Members assess project impact on the students, teachers, school system, and wider community through standardized tests and/or performance assessments.

10. Members assess project impact on the students, teachers, school system, and wider community through in-person visits and other alternative data gathered as part of an evaluation design.

11. The goals of the project are successfully met.

12. Outcomes of the project serve as a formative evaluation to guide future planning of partnership activities.

13. Participants possess varied and complementary skills, knowledge, and expertise.

14. Participants represent diverse social, ethnic, and economic backgrounds.

15. Participants include strong leaders.

16. Participants include energetic members with time to be actively involved.

17. Individuals exhibit personal commitment through attendance at meetings, sustained involvement, taking responsibility, and effort.

18. Organizations demonstrate commitment through allocation of resources, dedication, and support.

19. Public recognition of personal and organizational contributions sustains commitment of participants.

20. External funding such as grant programs sustains commitment of participants.

21. Students are involved in meetings and participate in decisions.

22. Teachers help to determine the areas that need attention and help to find solutions to problems.

23. Participant roles and responsibilities, including those of the project director or coordinator, are clearly defined.

24. There is an active steering and/or oversight committee.

25. The partnership is adequately funded with prospects for continued funding.

26. Exchanges benefit the partners as well as the collaborative project.

27. The level of contribution of resources varies among partners.

28. Resources extend beyond funding to include other material assets and/or the sharing of information and technical expertise.

29. Opportunities for networking link partner members to other individuals, groups, and organizations for mutual, project, and community benefit.

30. Exchanges between partners are mutually beneficial. (Mutual benefits may be direct or indirect and may include money, information, visibility, status, new opportunities or connections, influence, etc.)

31. The partnership encourages members to share information and expertise.

32. The partnership has an effect beyond the partners that may include the local or wider global community.

33. The partnership has a coordinator or project director who serves as a hub for timely, clear communications.

34. Partners communicate openly with each other. They listen to one another and think the input of other partners is significant.

35. Partners communicate through persistent attempts at personal contact, small group meetings, and systematic written information.

36. Partners disseminate information about project efforts and outcomes at the school, region, district, and national levels.

37. Partners discuss and agree on their process for shared decision-making.

38. Partners use consensus to agree on priorities and project activities.

39. Partners use action planning to develop operational strategies and steps for solving problems that can be expected to arise during the normal course of business.

40. Decisions made by the partners are based on open discussion of different perspectives of the problem and partners' opinions.

41. Partners schedule adequate time to work together.

42. Partners couple hard work with attention to group dynamics including political considerations.

43. Multiple partners operate as peers. Partners may carry unequal loads, but no partner dominates over the others.

44. The director/coordinator engages in non-partisan political activity.

45. Partner activities include a research-oriented project that is intellectually interesting.

46. Participants understand each partner's corporate/institutional structure and how to negotiate that system.

47. Partners reflect on their interactions as a method of learning about key variables for establishing and maintaining successful partnerships.

48. Partners reflect on their interactions as a method of learning how to get along better.

49. Even if it becomes institutionalized, the partnership is dynamic and continues to adapt to changing conditions.

50. The partnership should move through several stages of development.

51. The activities of the partnership should become institutionalized within the school and/or district.

52. As the partnership progresses, the role and responsibilities of the school should increase as those of the external partner decrease.

53. Partnership focuses on the process of change.

54. Lobbying by special interest groups influences decisions in the collaborative.

Appendix B. PQMethod Printout of Factor Characteristics, Standard Errors, and Distinguishing Statements for Each Factor, and Consensus Statements

Factor Characteristics

	Factors				
	1	2	3	4	5
No. of Defining Variables	7	5	4	3	4
Average Rel. Coef.	.800	.800	.800	.800	.800
Composite Reliability	.966	.952	.941	.923	.941
S.E. of Factor Scores	.186	.218	.243	.277	.243

Standard Errors for Differences in Normalized Factor Scores

(Diagonal Entries Are S.E. Within Factors)

Factors	1	2	3	4	5
1	.263	.287	.305	.334	.305
2	.287	.309	.326	.353	.326
3	.305	.326	.343	.368	.343
4	.334	.353	.368	.392	.368
5	.305	.326	.343	.368	.343

Distinguishing Statements for Factor 1

(P < .05 ; Asterisk (*) Indicates Significance at P < .01)

Both the Factor Q-Sort Value and the Normalized Score are Shown.

			Factors									
			1		2		3		4		5	
No.	Statement	No.	RNK	SCORE	RNK	SCORE	RNK	SCORE	RNK	SCORE	RNK	SCORE
5	common goals ...	5	4	2.20*	-1	-.44	1	.57	2	.95	1	.69
37	shared decision-making ...	37	4	1.90*	-1	-.38	1	.43	-2	-.76	-2	-.91
39	action planning ...	39	3	1.21	4	1.83	-1	-.56	0	-.18	-3	-1.39
52	external partner role ...	52	1	.56	0	-.06	-2	-.71	4	1.90	0	-.25
30	mutual benefit/partner ...	30	-1	-.76*	2	.75	0	.25	2	.76	2	.74
2	school infrastructure ...	2	-2	-.82	-4	-1.59	-4	-2.48	-4	-2.26	0	-.19
29	networking ...	29	-2	-1.05	2	.94	-1	-.43	1	.24	3	1.13
25	adequate and future fu ...	25	-3	-1.16*	1	.35	2	1.14	3	1.37	3	1.64

Distinguishing Statements for Factor 2

(P < .05 ; Asterisk (*) Indicates Significance at P < .01)

Both the Factor Q-Sort Value and the Normalized Score are Shown.

			Factors									
			1		2		3		4		5	
No.	Statement	No.	RNK	SCORE	RNK	SCORE	RNK	SCORE	RNK	SCORE	RNK	SCORE
4	sensitive to context ...	4	2	.82	4	2.10*	2	1.21	0	-.11	0	-.02
23	roles defined ...	23	2	1.12	4	1.93*	-3	-1.26	1	.69	0	.07
39	action planning ...	39	3	1.21	4	1.83	-1	-.56	0	-.18	-3	-1.39
36	information disseminat ...	36	-1	-.59	3	1.55*	-1	-.53	0	-.22	0	-.18
25	adequate and future fu ...	25	-3	-1.16	1	.35	2	1.14	3	1.37	3	1.64
5	common goals ...	5	4	2.20	-1	-.44*	1	.57	2	.95	1	.69
11	goals met ...	11	1	.41	-1	-.63	0	.14	2	1.28	2	.92
16	energy and time ...	16	1	.32	-2	-.89*	4	1.67	2	.71	0	.22
6	worthy goals ...	6	1	.37	-2	-1.01*	0	-.14	3	1.66	4	2.03
1	school stable ...	1	-1	-.44	-3	-1.44	-1	-.69	2	.69	1	.33

Distinguishing Statements for Factor 3

(P < .05 ; Asterisk (*) Indicates Significance at P < .01)

Both the Factor Q-Sort Value and the Normalized Score are Shown.

			Factors									
			1		2		3		4		5	
No.	Statement	No.	RNK	SCORE	RNK	SCORE	RNK	SCORE	RNK	SCORE	RNK	SCORE
16	energy and time ...	16	1	.32	-2	-.89	4	1.67*	2	.71	0	.22
8	dynamic goals ...	8	0	.17	0	.17	3	1.31*	-1	-.58	0	-.11
49	dynamic even if instit ...	49	0	.13	1	.37	3	1.28*	0	-.16	1	.27
43	no domination ...	43	-2	-.87	-1	-.55	2	1.04*	0	-.16	-1	-.42
37	shared decision-making ...	37	4	1.90	-1	-.38	1	.43	-2	-.76	-2	-.91
14	diversity ...	14	-2	-1.01	-3	-1.26	0	.22	-2	-.62	-2	-.84
35	communication routiniz ...	35	2	.69	1	.24	-1	-.45	3	1.53	1	.43
54	lobbying of special in ...	54	-4	-2.19	-4	-1.87	-2	-.94*	-4	-1.95	-4	-2.51
23	roles defined ...	23	2	1.12	4	1.93	-3	-1.26*	1	.69	0	.07
3	community stable ...	3	-2	-.77	-2	-.75	-4	-2.46*	-3	-1.51	-2	-.61

Distinguishing Statements for Factor 4

(P < .05 ; Asterisk (*) Indicates Significance at P < .01)

Both the Factor Q-Sort Value and the Normalized Score are Shown.

			Factors									
			1		2		3		4		5	
No.	Statement	No.	RNK	SCORE	RNK	SCORE	RNK	SCORE	RNK	SCORE	RNK	SCORE
52	external partner role ...	52	1	.56	0	-.06	-2	-.71	4	1.90*	0	-.25
35	communication routiniz ...	35	2	.69	1	.24	-1	-.45	3	1.53	1	.43
42	group dynamics and pol ...	42	-3	-1.15	-1	-.48	-2	-.86	1	.27	-3	-1.52
3	community stable ...	3	-2	-.77	-2	-.75	-4	-2.46	-3	-1.51	-2	-.61

Distinguishing Statements for Factor 5

(P < .05 ; Asterisk (*) Indicates Significance at P < .01)

Both the Factor Q-Sort Value and the Normalized Score are Shown.

		Factors									
			1		2		3		4		5	
No.	Statement	No.	RNK	SCORE	RNK	SCORE	RNK	SCORE	RNK	SCORE	RNK	SCORE
2	school infrastructure ...	2	-2	-.82	-4	-1.59	-4	-2.48	-4	-2.26	0	-.19
46	common understanding o ...	46	-1	-.46	1	.49	-1	-.53	0	-.09	-3	-1.38
39	action planning ...	39	3	1.21	4	1.83	-1	-.56	0	-.18	-3	-1.39

Consensus Statements -- Those That Do Not Distinguish Between ANY Pair of Factors.

All Listed Statements are Non-Significant at P>.01, and Those Flagged With an * are also Non-Significant at P>.05.

		Factors									
			1		2		3		4		5	
No.	Statement	No.	RNK	SCORE	RNK	SCORE	RNK	SCORE	RNK	SCORE	RNK	SCORE
10	visits and alternative ...	10	0	.08	1	.64	1	.28	2	.91	1	.59
13*	range of skills ...	13	0	.11	0	-.10	0	.01	0	.09	0	-.12
31	share information and ...	31	1	.58	2	.79	1	.34	1	.24	3	1.10
45	research oriented inte ...	45	-1	-.37	-2	-1.05	-1	-.64	-2	-.80	-2	-1.12

QANALYZE was completet at 09:54:29